

**Features**



- External dimensions: 11.4 x 4.8 x 3.8 mm.
- Frequency range: 3.579545MHz ~ 64MHz.
- Surface mount type crystal units.
- A great number of standard frequencies.
- High frequency pullability and low equivalent series resistance.
- Highly mass production capability.
- Applications: PC, STB, LCDM and Cable Modem.

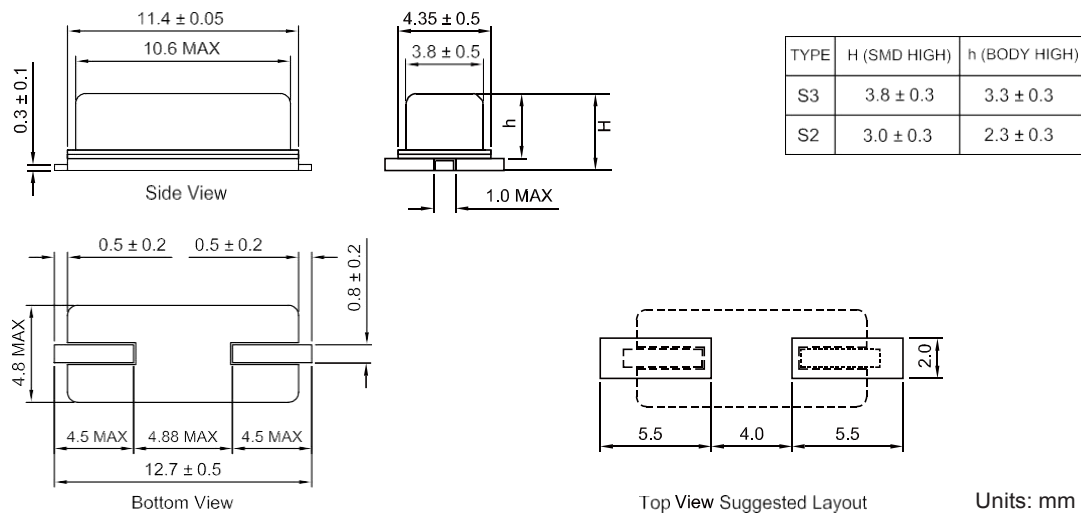
**Electrical Specifications**

| Item / Type                                  | HC-49SMD                      |
|--|-------------------------------|
| Nominal Frequency Range                      | 3.579545Mhz                   |
| Vibration Mode                               | AT Fundamental                |
| Load Capacitance                             | 30 pF                         |
| Frequency Tolerance (at 25 °C)               | ± 20 ppm                      |
| Frequency Versus Temperature Characteristics | ± 30 ppm                      |
| Operating Temperature                        | - 20 ~ + 70 °C                |
| Storage Temperature                          | - 40 ~ + 85 °C                |
| Shunt Capacitance                            | 7 pF Max.                     |
| Level Of Drive                               | 1 ~ 500 μ W (100 μ W typical) |
| Frequency Aging (at 25 °C)                   | ± 3 ppm / year Max.           |

**Equivalent Series Resistance(ESR)**

| Fundamental      |            | 3rd Overtone |            |
|------------------|------------|--------------|------------|
| 3.579545 ~ 4 MHz | 150 Ω Max. | 20 ~ 25 MHz  | 100 Ω Max. |
| 4 ~ 5 MHz        | 120 Ω Max. | 25 ~ 64 MHz  | 80 Ω Max.  |
| 5 ~ 6 MHz        | 100 Ω Max. |              |            |
| 6 ~ 7 MHz        | 80 Ω Max.  |              |            |
| 7 ~ 10MHz        | 60 Ω Max.  |              |            |
| 10 ~ 27MHz       | 40 Ω Max.  |              |            |

**Dimensions**



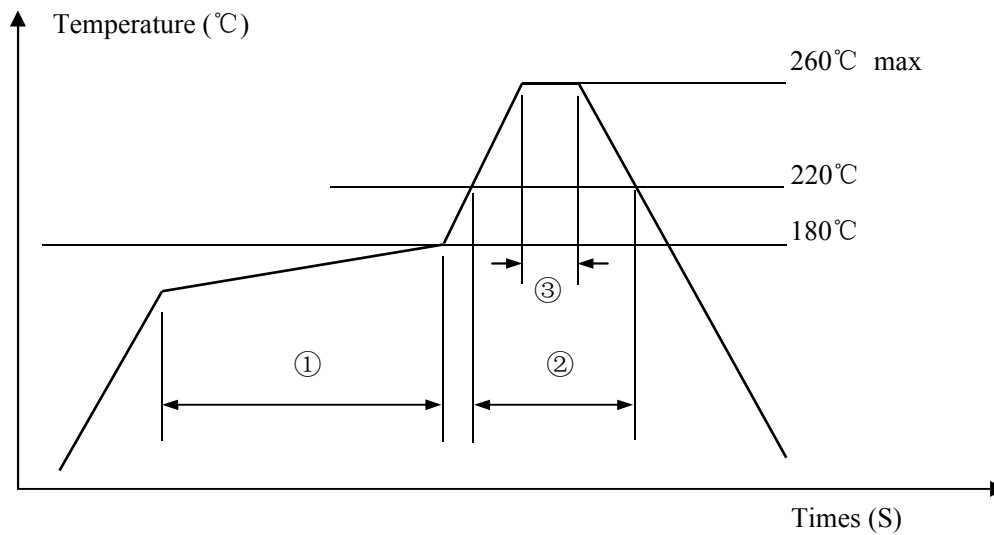
给您一颗快乐的“芯”！

# HC-49SMD X49SM3579545MWD2SC-1

★ PART NUMBER GUIDE 部件号示例 e.g. X49SM3579545MWD2SC-1 HC-49 SMD=11.4×4.35 SMD SEAM TYPE

| Quartz Crystal Resonator | Dimensions | Frequency (MHz) | Load Capacitance (Pf) | Frequency Stability Overall (ppm) | Pin   | Material | Operating Temp. Range |
|--------------------------|------------|-----------------|-----------------------|-----------------------------------|-------|----------|-----------------------|
| Passive Crystal          | 49SM       | 3.579545M       | 30.0pf                | ±20ppm                            | 2 Pin | Metal    | -20 ~ +70°C           |

★ REFLOW SOLDERING PROFILE 回流焊特性



|                     |   |              |           |             |
|---------------------|---|--------------|-----------|-------------|
| Pb free reflow<br>A | ① | Preheat      | 160~180°C | 120sec. max |
|                     | ② | Primary heat | 220°C     | 60sec. max  |
|                     | ③ | Peak         | 260°C     | 10sec. max. |